DOCUMENT RESUME

ED 090 847 HE 005 445

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TITLE	Faculty Receptivity to Organizational Change.
PUB DATE	Apr 74
NOTE	31p.; Paper presented at the annual meeting of the American Educational Research Association, Chicago, April 1974
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	*Collective Bargaining; College Faculty; Demography; Educational Change; *Educational Innovation; *Equal Opportunities (Jobs); *Faculty; Governance; *Higher Education; Research Projects; Statistical Analysis; Teacher Attitudes
IDENTIFIERS	*Affirmative Action

ABSTRACT

Responses of 160 faculty members to seven innovations involving such organizational areas as collective bargaining, Affirmative Action and school governance in higher education were examined using two prevailing models. One links resistance to personality and the other to organizational status. Seven semantic differentials, demographic questions, and three standard scales were used in measuring receptivity, organizational characteristics, and personality factors. Multivariate statistical analyses revealed important faculty differences in receptivity to the innovations, and significantly more variance explained by status characteristics than by personality factors. (MJM)

Session 2.02

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Faculty Receptivity to Organizational Change*

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Studies of planned change in organizational settings such as schools, hospitals, and factories continue to grow in number in the social science literature. With regard to the overall success of the change efforts studied, investigators agree that receptivity plays an important part. But, there remains substantial disagreement about the extent to which organizational members react positively to change and about the specific part that receptivity plays in the process of planned change (cf., Brickell, 1964:505; Gross, Giacquinta, and Bernstein, 1971: 196-205; Zaltman, Duncan, and Holbek, 1973: 94-104; with Argyle, 1967:95; Morris and Binstock, 1966:94-95; Thomas, 1973:9). By receptivity we mean how people are oriented internally toward proposed innovations and not how they behave in relation to those innovations.[2] In addition to disagreements about its pervasiveness and specific effects, our understanding of its causes is imprecise and in need of careful study (Giacquinta, 1974:189-192).

This paper reports research that sheds light on the relative value of two theories of receptivity, which are loosely defined throughout most of the literature. The research was based on data gathered in a higher educational setting and involved faculty responses to seven proposed organizational innovations.[3]

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*A paper to be presented at the annual meeting of the American Educational Research Association in Chicago, April 1974.

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Of the two explanations present in the literature, one is psychologically based and holds that organizational members' receptivity to change is a function of their personalities (viewed as internal systems -- including elements such as attitudes, motives, values, needs, and habits -- that predispose people to relate in a consistent fashion to the environment). This explanation proposes that members are, to a greater or lesser degree, innovative by virtue of their personalities. Rogers (1965: 57-58), for example, notes that people vary in their propensity for innovativeness and contrasts "innovators" with "laggards." His effort with Shoemaker (1971:174-195) to marshall research related to innovativeness is the most extensive to date. Some investigators have constructed scales purporting to measure the trait of change. Some of these scales (e.g., Edwards, 1965: 190-207) deal with this change propensity very broadly, while others focus on one's personal orientation toward change in specific areas or on the change attitudes of people in specific occupations (e.g., Neal, 1965; Russell, 1971; Trumbo, 1961). Still other investigators have produced scales purporting to measure personality characteristics, like dogmatism (Rokeach, 1960), which have been related, in turn, to the change orientations that people have.

The second explanation of receptivity is fundamentally sociological. It begins with the observation that persons occupy both formal and informal organizational statuses and that overlapping these are other formal and informal statuses, which they occupy but which are external to the organizational settings in question. One example comprising all four kinds of statuses would be a secretary at a university, a woman who is also a national officer of a political group and a mother of three. Linked to the configuration of statuses held by persons is a series of perquisites, such things as prestige, money, influence, and even mental and physical gratification. This explanation goes on to posit that members respond to specific innovations, not innovation in general, and that they do so in terms of whether the innovation would bolster or present uncertainties and risks to the perquisites accruing to them in their present statuses. Thus, whether members are more or less receptive depends on whether the innovation is seen as enhancing their prestige, money, influence and the like or as threatening the perquisites they possess, especially those attached to their organizational statuses. The greater the risks and uncertainties they perceive, the lower their receptivity. Recent empirical studies linking receptivity to organizational status or to general social status include Becker (1971), Cancian (1967 and 1972), and Giacquinta (1974). Other investigations have been concerned with allied issues such as under what conditions will people act even though there are uncertainties and risks (Cohen, 1964; Carney, 1971; Kogan and Wallach, 1964; and Knight, 1921).

While these explanations have received separate scrutiny, we began this research with the notion that another approach to the full development of an adequate theory of receptivity would be to study both explanations simultaneously. In other words, prior research has not shed much light on the relative strengths of each of these theories in accounting for organizational members responses to the same innovation, nor have any systematic studies using both explanations examined the responses of the same organizational members across an array of widely divergent proposed innovations. Our strategy in this piece of research, therefore, was to treat the two as competing theories of receptivity and to ask the question: To what extent does one or the other provide a better explanation of faculty receptivity to an array of innovations? Speaking statistically, the question we were asking was: To what extent do status characteristics or personality factors account for a greater proportion of the variance in faculty receptivity scores?

We reasoned that if the status risk explanation was more fundamental to faculty receptivity, then subsequent statistical analyses should reveal: (1) that status characteristics of faculty members would be related to their receptivity, (2) that these status characteristics would not be equally important in explaining faculty receptivity to each innovation in the array, since we selected innovations touching upon different aspects of school organization, and (3) that for each innovation, status characteristics would account for a greater proportion

of the explained variance in receptivity than would personality characteristics.

We reasoned, on the other hand, that if the personality explanation was more fundamental to the understanding of receptivity, then we would expect the following to be true: (1) for each innovation, significant correlations between receptivity scores and measures of personality would emerge, (2) that personality factors would account for a greater proportion of the explained variance in receptivity than would status characteristics, and (3) that the inter-correlations of members' receptivity scores across the seven innovations would be consistent and strong.

RESEARCH PROCEDURES

The Setting and Research Sample

The data, as noted above, were gathered from faculty in a school of education. This setting was particularly appropriate in that both the school and the university of which it was a part were considering various innovations in order to resolve a number of organizational problems involving effectiveness, efficiency, and mission. A total of 215 faculty members, all of the school's assistant, associate and full professors, were included in the original sample. As part of the study, questionnaires (to be discussed below) were delivered to faculty by hand during a 3 week period in March of 1973. Faculty members were asked to complete and return them as quickly as possible. Several follow-up efforts were made to secure those instruments not returned. The final response rate reached 82%, but because of late returns, the number of faculty members actually used in the analysis was 152 or 70%

of the original sample. Table 1 presents a summary of the characteristics of the faculty used in the analysis.

Table 1 About Here

Nearly 40% of the faculty held full professorships, with assistant professors accounting for about 25% of the sample. More than half the faculty were tenured; two thirds were male. About 50% of the faculty fell between the ages of 36 and 50. Approximately 90% of the faculty hold doctoral degrees, with almost twice as many having Ph.D.s as compared to having Ed.D.s. Most of the faculty have published at least once or twice with a majority publishing over three articles within the last five years. The faculty is nearly divided between those who teach graduate students only and those who teach both graduates and undergraduates. Nearly three times as many faculty consider teaching to be their primary role priority as compared to research and writing (65% compared to 25%).

Data Collection Instruments

In order to collect the data, a three part, self-administered questionnaire was constructed. The first part measured various status characteristics. Although the original instrument contained additional items, the final number of status-related variables used in the analysis was 10. Categorized as internal formal statuses were academic rank,

administrative rank, level of instruction, and tenure. Advisement, research, and teaching preferences as well as sex were taken to be indicators of various informal aspects of faculty organizational status. Number of publications in the past five years and faculty group affiliation (whether local or more cosmopolitan) were treated as indices of informal statuses external to the organization. The group affiliation measure, a scale, was included in the third section of the questionnaire.[4]

The second part was composed of seven semantic differentials, each measuring one of the seven organizational innovations chosen for the study. Two criteria were used in selecting the array of specific innovations. If the proposed innovations were to be taken seriously by the faculty members, then the semantic differentials would have to elicit "real" responses. One criterion, therefore, was that the innovation had to be either newly introduced into the school or under serious consideration in this or other comparable schools. A second criterion was that as a total array, the innovations would have to touch upon diverse aspects of the organization, for example, changes in faculty performance in classrooms, changes in the structure of decision making in the school, changes in the overall mission of the school, and changes in its relationship to the remainder of the university.[5]

The following seven innovations, presented in their questionnaire order, conformed to these criteria and were included in the study: student involvement in school governance in the form of an education council (EDCO), reorganization of the school into a graduate school (REOR), adoption of

a university-without-walls undergraduate college (UWWC), introduction of supplemented instructional television (SITV), adoption of unsupplemented instructional television (UITV), introduction of an affirmative action policy for women and racial minorities (AFAC), and adoption of faculty collective bargaining (COBA). EDCO was defined for the faculty as changing the school's authority structure in such a way that students would have voting power on this policy recommending body. REOR was presented as the alteration of the school into a graduate school stressing the extension of knowledge about education and schooling through research. Undergraduate programs would be phased out with graduate programs becoming the sole training focus of the new structure. UWWC was specified as an alternative route in the University for undergraduates. It would involve greater individualization, less classroom instruction, and more student work experience. SITV was defined as an innovation requiring students, in addition to attending video-taped lectures, to meet regularly for discussion sections with faculty. UITV was presented as a replacement of classroom teaching entirely with video-taped lectures. Instructors would have no direct instructional contact with students. AFAC was specified as a change in recruitment criteria and procedures giving priority to the employment of qualified women and racial minorities. COBA was described as the adoption of an elected bargaining agent to engage in binding negotiations with the administration about faculty benefits.

As noted, faculty receptivity to each of these innovations was measured by a separate semantic differential (Osgood, Suci, and Tannenbaum, 1957). The semantic differential method is widely used for measuring the meaning of an object or a concept to individuals. It is an especially

useful paper-and-pencil measure when no scales are available. Any concept, be it a person, institution, or idea can be rated. Subjects are required to rate concepts as being more closely related to one or the other of a set of bi-polar adjective pairs such as ugly-beautiful and fast-slow. Summary scores generated for each concept through factor analysis are, depending upon the adjective pairs chosen, in one or more of three areas: evaluation, potency, and activity. In this study, the innovations were treated as concepts to be rated and a series of eight adjective pairs were selected because of their high loadings on the evaluative dimension in prior studies. The eight pairs in the order presented to the subjects were: good-bad, progressive-regressive, foolish-wise, ineffective-effective, worthless-valuable, important-unimportant, tense-relaxed, and positive-negative. Each pair was separated by a seven point scale, three points on one side indicating intensity of feeling in one direction, the middle point standing for neutral, ambivalent, or equal evaluation, and the three points on the other side representing stronger feelings in that direction.[6]

Table 2 presents a summary of the eight adjective pairs and their varimax loadings on the evaluative dimension for each semantic differential. Weights based on these loadings were used along with subjects' raw scores to compute factor scores for subjects on each concept. Scores generated in this manner are standardized, so that in all cases the mean is 0 and the standard deviation is 1. These factor scores were then used as our measures of faculty receptivity to each of the seven proposed innovations.

Table 2 About Here

The wide range of factor scores for each semantic differential was interpreted to mean that important differences existed among the faculty members in their receptivity to each innovation. The innovation with the greatest range was Education Council (-3.05 to 3.17), while Affirmative Action had the smallest range (-3.16 to 1.19).

Three scrambled scales comprised the third part of the questionnaire. They were (1) the short form of Rokeach's Dogmatism Scale, (2) the Trumbo Work-Related Change Scale, and (3) the Dye Local-Cosmopolitan Scale. The short form of the Rokeach Dogmatism Scale was used in the present study as a measure of personality, which Rokeach (1960) describes as having potential utility for predicting change orientation. He notes that the scale is an effective measure of security or insecurity, a personality characteristic which has been used in past change research (Lin et al., 1966; Mechling, 1969; Russell, 1971; Troldahl and Powell, 1964; and Vacchiano, Strauss, and Schiffman, 1968: 83-85). The possible range of scores on this twenty-item, Likert-type summated rating scale is from 20 to 100. The higher the score,

the greater the degree of dogmatism or close-mindedness. The mean for this sample was 42.19 with a standard deviation of 8.27. This indicates that taken as a group, the faculty was slightly below the mid-point on dogmatism. Using coefficient alpha, the reliability of the short form for the faculty was calculated to be .72.

The Trumbo Work-Related Change Scale is a nine-item Likert-type scale used as a measure of general attitudes towards change in work related activities. Trumbo (1961) reports a split-half reliability coefficient of .79. The scale has been found to predict attitudes toward change situations, particularly when employees perceive or anticipate changes in their own jobs. The possible range of scores is from nine to 45, a low score indicating greater desire for work related change. The mean score for this sample was 22.41, which indicates that as a group, the faculty had a slightly positive attitude toward work related change. The reliability with these subjects was found to be .56, using the alpha coefficient.[7]

The Dye Scale, a five-item Likert type, is intended to identify the extent of a person's external social affiliation and status, from a local to a broader national or international frame of reference (Dye, 1963, pp. 239-246). Respondents are asked to express their degree of agreement or disagreement with each of the five items. Scores range from five (least localistic) to 30 (most localistic). The mean score for this group was 10.22 with a standard deviation of 2.91. The reliability for the sample using the alpha coefficient was computed to be .61. In this

study, we interpreted Dye to be a measure of faculty members' external informal status as they perceive it.

RESULTS

We used regression analysis (Kerlinger and Pedhazur, 1973) as our basic mode of statistical inquiry to test the relative efficacy of the personality and social status explanations of receptivity. We decided not to force the order of the independent variables, since our strategy was to permit personality and/or status characteristics to enter freely into the regression analysis depending upon the relative amounts of variance each explained.[8] For each innovation, therefore, a stepwise solution was performed using selected status and personality characteristics as independent variables.[9]

A regression analysis produces a multiple correlation coefficient which can be interpreted as the proportion of variation in the dependent variable explained by the independent variables entered in the solution. Also emerging from regression analysis are the beta coefficients for each of the independent variables. Because these regression coefficients are standardized, they can be compared to one another to judge their relative influence on the dependent variable. In short, regression analysis using a stepwise solution was our way to determine the degree to which personality or status characteristics accounted for more of the explained variance in faculty receptivity for each of the seven innovations. As noted before, a number of status characteristics (classified as either internal formal, internal informal, or external informal) and

and two personality measures (the Trumbo change scale and the Rokeach dogmatism scale) were used as independent variables.

The correlation matrix used in computing the regression analyses of faculty receptivity to the array of organizational innovations is presented in Table 3 along with each variable's mean and standard deviation.

Table 3 About Here

Summarized in Table 4 are the results of our stepwise solutions for each of the seven innovations using the 12 independent variables previously discussed. The table reveals important differences in the strengths of the multiple correlations for each innovation and, thus, in the percent of receptivity variance explained by various combinations of the personality and status characteristics. The percent of variance explained ranged from a high of 17% (REOR) to a low of 4% (UITV). Since the multiple correlation for UITV did not reach significance, it is omitted from the presentation of results that follow.

Table 4 About Here

The three innovations evidencing the strongest multiple correlations of faculty receptivity with various combinations of independent variables were: REOR (R=.411), COBA (R=.408), and AFAC (R=.329). The other three innovations had weaker correlations: UWWC (R=.291), EDCO (R=.290), and SITV (R=.256). The significance of this ranking will be discussed later, for now we will use it to order our presentation of the results of the regression analyses.

In judging whether the status characteristics and personality measures were related to faculty receptivity and, if so, whether one set accounted for more variance than the other, it was important to examine the beta coefficients for the independent variables involved in each solution. Since beta coefficients are standardized for each solution and can be compared, they are extremely useful in determining the relative effect of each independent variable, holding the others constant. They become particularly valuable when they reach significance.

Of the eight independent variables entered into the stepwise solution for REOR, four had significant beta coefficients. The strongest were status characteristics (academic rank=.294; number of publications=.232; and research priority=-.186). The fourth significant beta of .171 was for general innovativeness, a personality characteristic. The negative direction of the regression coefficient for research priority was due to the fact that highest priority was set equal to one and lowest priority, to five. All three betas for COBA were for status characteristics: tenure (-.310), academic rank (.247), and administrative rank (.235). For AFAC, the one significant regression coefficient was for sex (-.308;

a minus direction because female=1). As in the case of COBA, neither personality measure entered the solution. For EDCO the two significant betas were also for status dimensions: group affiliation (.204) and sex (-.162). The one significant coefficient for SITV was again for an aspect of status -- level of instruction (-.188). While none of the four variables entered into the analysis for UWWC had significant betas, two were for personality characteristics.

With the exception of UWWC (where the status and personality variables had equal weight even though none had significant betas), status characteristics always proportionately outnumbered personality entries. And, more importantly, the strongest determinants were always status characteristics.

By looking at Table 4 in another way, we can judge the importance of each status characteristic in explaining faculty receptivity to the array of innovations. All 10 status characteristics had at least one significant beta in the array. But only two, academic rank and sex, entered more than one of the six analyses and in both cases were entered into two analyses. The strongest status determinant differed for each innovation: academic rank for REOR; administrative rank for COBA; sex for AFAC; affiliation group for EDCO; and level of instruction for SITV. Moreover, in this set of analyses, internal formal and informal status characteristics seem to have played a more important role. However, since sex could be viewed as an external status, this finding remains tentative.

Since there were far more measures of status than personality, it could be argued that a number of the findings reaching significance for

aspects of status occurred by chance; had there been more personality measures, a greater number of chance findings of significance would have occurred for personality. Moreover, it could be argued that a wider variety of personality measures might have increased the salience of personality as a determinant of faculty receptivity variance.

An indirect test of whether personality characteristics omitted in this analysis did have an important impact on receptivity without actually specifying the characteristics would be to intercorrelate faculty factor scores across the seven innovations. We reasoned that strong correlations across the innovations would lend support to the thesis that there was an underlying personality dimension causing faculty to respond to the disparate innovations in a consistent fashion. It should be mentioned that this line of reasoning does not address itself to the possibility that there was a separate underlying personality characteristic for each of the seven innovations. These seven underlying characteristics could be unrelated.

The correlation matrix in Table 3 contains the 21 various combinations of zero order correlations among the faculty's receptivity scores (variables 13-18). Of the 21 coefficients, nine were significant, but, more important than simple significance is the strengths of the associations. Of the nine significant coefficients, the strongest one was .37 (between AFAC and EDCO). Of the remaining eight significant correlations, the majority were much weaker. This analysis reveals that faculty responses across the seven innovations were not systematically correlated, and thus, according to our rationale supports the conclusion

that there was no personality dimension omitted from our investigation which would have explained consistent faculty responses to the array of innovations.

CONCLUSIONS AND IMPLICATIONS

At the outset of the paper we reasoned that if the status-risk theory was correct, then we would expect to find: significant correlations between status characteristics and receptivity; greater amounts of explained variance related to status and not personality; differences in the status characteristics that were most important in faculty receptivity to each innovation; and little correlation among the faculty's receptivity scores for the seven innovations. All of these were confirmed by the subsequent analyses. First, for the six innovations with significant multiple correlations, the regression analyses uncovered important relations between receptivity and various internal and external status characteristics, while the personality factors entered far fewer of the six regression analyses. Second, in all but one (UWWC) of the analyses, the characteristics accounting for most of the explained variance were status, not personality variables. Third, although some analyses included the same status characteristics, the most important aspect of status was different for each innovation. Lastly, there were weak or no correlations among faculty receptivity scores across the seven innovations.

On the basis of the foregoing, we concluded that the evidence gathered from the faculty at the school of education which was under investigation

supports the theory that receptivity to proposed organizational change is innovation-specific and a function of organization members' status characteristics and the risks that they perceive as a result of their status occupancy.

Although the above results support the status-risk explanation and not the personality theory, it is true that the major proportion of receptivity variance in the case of each innovation remained unexplained. One of the reasons for this might rest with the actual reality or importance of the innovation chosen for investigation. You will recall that three of the innovations had sufficiently larger multiple correlations than the others. Upon reflection, we believe that the subset with higher correlations (AFAC, COBA, and REOR) may have been more germane to the faculty. They certainly were innovations taken more seriously in the school. This is supported by the informal observations that many faculty were upset when AFAC was adopted, that in relation to COBA an election was being planned, and with regard to REOR, that committees had been set up to consider possible schemes of reorganization for the school. Prior to this, faculty were very aware of declining undergraduate enrollments and increasing graduate enrollments. UWWC, SITV, UITV, and even EDCO, which was close to being adopted when the study was initiated, did not stir controversy among most faculty. If we assume that these latter four were so removed from the day-to-day reality of most faculty, the variations in responses might have been due to more abstract considerations, whereas the more controversial innovations might have evoked positive or negative reactions on the basis

of firm or concrete aspects of status. Hence, when the regression analyses were conducted, they uncovered some of the real status factors causing the receptivity variance for AFAC, COBA, and REOR. Since these factors were absent in the case of the "less real" innovations, the percentage of variance accounted for by these factors was far less. This explanation of the rank ordering of the innovations and their explained variances, points up the need in future studies of receptivity to be extra cautious in picking out the innovations used. Unless they are "real," the study of receptivity to them might lead to many dead ends.

Another reason for the minimum proportions of variance explained might be related to the choice of status characteristics. Perhaps different status characteristics might have led to increased explanatory power of the status-risk theory. In the present study, for example, questions about actual job performance instead of preferred role priorities might have distinguished better those who are, by role preference, researchers and those who are primarily concerned with teaching and informal relationships with students. Perhaps length of time in the university would have been a better index of enduring commitment to the school and to a local orientation than faculty rank or tenure. Another status characteristic, unexplored in this study, was departmental affiliation. It is possible that professors in applied or practical areas would have been more receptive to an innovation like ITV than those professors in the humanities. Departmental affiliation might have proven useful as one more way of determining the receptivity to some of the innovations. The possible omission of important status variables in this study suggests the value of doing thorough analysis or profiles of the

statuses and their characteristics in each specific organizational instance before beginning an investigation.

There is also the possibility that aspects of status interact and influence receptivity through their interaction. Even further, some of the status characteristics may be curvilinearly related to receptivity. This analysis assumed that the relations were additive and linear. It did not test for these other possibilities. Further analysis might show that a far greater proportion of variance will be explained when the interactive and curvilinear possibilities are explored. Researchers doing future studies of receptivity using regression analysis must keep interaction of independent variables and their possible curvilinearity firmly in mind.

One last, practical implication of this line of study: assuming the status-risk explanation of receptivity has validity, administrators and reformers will need to begin viewing unreceptivity to change more often as the rational response of organizational members to threats in their status. And they will need to develop a more comprehensive view of status -- i.e., as a configuration involving formal and informal internal organizational elements and formal or informal elements external to the organization. By so doing, they would take better stock of likely sources of unreceptivity and receptivity, assess more accurately the validity of these responses, and thereby, could take more honest and genuine actions that might help reduce members' perceptions of risk. These activities would, in turn, promote the success of implementing innovations in organizations.

FOOTNOTES

[1]Completion of this research paper was supported in part by NYU's School of Education and its Academic Computer Center and in part by fellowship funds granted to J. Giacquinta through the National Academy of Education by the Spencer Foundation.

[2]Some authors use the term resistance interchangeably with that of receptivity, while others restrict resistance to overt behavioral acts. The work reported here does not deal with overt behaviors, nor does it deal with the relationship of behavioral acts to internal orientations. Needless to say, both of these areas are crucial to the understanding of planned organizational change and require serious empirical attention.

[3]For a more thorough discussion of studies bearing on each of the tentative explanations and additional analyses of the data gathered in this setting see Kazlow (1974).

[4]It should be noted that sex could have been classified as an external, informal status characteristic, while number of publications could have been used as an index of internal informal status.

[5]Leavitt's (1964, pp. 1144-1145) paradigm of the socio-technological nature of organizational innovations provided a useful guide to our thinking. He describes four categories: changes which affect the primary goals or objectives of an organization; changes in the composition or constitution of members; changes in the organization's work procedures and machinery; and changes in the social structure -- system of communication, roles, authority structure, or work-flow system.

[6]The procedures of data reduction as well as the reliability and validity of semantic differentials have been discussed at length in the literature (e.g., Nunnally, 1967; 535-544; Osgood et al., 1957: Chapter 3). Recently, semantic differentials have been used with success in studies of receptivity to change in higher education (Evans and Leppmann, 1967) and of receptivity to innovation in elementary school (Giacquinta, 1974). In order to arrive at a summary factor score for each subject on each of the seven differentials, a comprehensive factor analysis program (Veldman, 1967: 206-245) was used. For each semantic differential the correlation matrix based on the 152 subjects' responses to the eight pairs of adjectives (each ranging from a possible low of "1" to a high of "7") was factor analyzed, and subsequent varimax rotation of each principle components analysis produced the necessary factors.

[7]Other personality tests--some including change subscales--were considered. For example, both the Edwards Personal Preference Schedule (Edwards, 1965) and the Omnibus Personality Inventory (Heist et al., 1962) were reviewed. All were finally rejected because their length would have reduced to an unacceptable level the probable number of faculty returns. We tried to provide a further test of personality, as will be seen later, indirectly through the use of a factor score intercorrelation matrix.

[3] Nevertheless, we did have some hunches about the various ways in which the status characteristics might be related to the innovations, some hunches being subsequently confirmed and others not. With respect to EDCO, we thought cosmopolitans more liberal in their general outlook might not be inclined to share their power with groups such as students in the academic community and would, thus, be unreceptive. Student participation might constitute a real threat to the power and prestige of cosmopolitan professors, particularly because of their concern for writing and research, not teaching and student advisement. Locals, on the other hand, would have more school interests and rather than threatened would view this innovation as complementary to their interests. We considered it probable that faculty having research oriented positions and those who had little affiliation with undergraduates would be more likely to welcome a change such as REOR as a way of maximizing their professional activities. Faculty with little research emphasis in their present positions in undergraduate programs would feel a great threat and therefore strongly oppose this proposed change. We expected administrators in the school of education more than likely to be opposed to UWWC since it might attract undergraduates away from the school of education. Moreover, professors who taught undergraduates would also, more than likely, be threatened, since they would be in jeopardy of losing students from their programs.

We reasoned that faculty choosing writing and research as a primary role responsibility might favor SITV because it would afford them greater time to devote to research. Administrators also might favor SITV as a means of utilizing professors' time more efficiently and perhaps eliminating some faculty positions. In addition, it was reasoned that faculty with teaching and informal advisement as top priorities might be unreceptive to the innovation because of its de-emphasis of personal contact. We speculated that faculty responses to UITV would be extensions of their responses to SITV. Faculty with research and writing priorities would favor UITV even more than SITV. Administrators would see this as being an even greater step toward organizational efficiency. On the other hand, faculty members to whom teaching and student contact were high role priorities would probably be even more unreceptive to UITV, as it would be seen as a further erosion of the essence of their organizational statuses.

We felt that sex could be the important status characteristic differentiating receptive from unreceptive faculty members on AFAC, since women might view this change as enhancing their general organizational and societal status and as redressing the faculty imbalance which most professional women see. Men, on the other hand, might view this policy as a wedge for allocating less qualified women and blacks to positions on a non-achievement basis and as placing their own statuses within the school in jeopardy. They would, therefore, be far more resistant than women to it. With COBA our thinking was that younger, non-tenured faculty as compared to tenured faculty and administrators would be more receptive, since they might see it as providing them with a quicker way of obtaining various status perquisites. The older-tenured faculty would view the union as infringing on the professional status and autonomy which they had to earn over the years without "benefit" of collective negotiations. Moreover,

while faculty in general would see collective bargaining as a way of gaining faculty power and thus increasing their organizational positions, administrators probably would view this change as a direct threat to their decision-making prerogatives in many areas of organizational life. Thus, administrators would be far more resistant than faculty.

[9]The Data-Text Computer Program (Armor and Couch, 1973) was used. For a given dependent variable, such as receptivity to the innovation Education Council, the stepwise solution permitted the independent variables to be entered into the regression equation one at a time until the addition of a subsequent variable contributed no more than one percent of the variance. This procedure enabled us to get beta coefficients (standardized partial regression coefficients) and, thus, a fairly good idea of the relative weights of variables which contributed to the overall solution. The overall solution produced a multiple correlation, the square of which was the amount of variation in each dependent variable explained by the various combinations of independent variables entered into each regression analysis. Significance tests for the regression coefficients and for the multiple correlation were also produced.

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TABLE 1. Percentage and Frequency Distributions of Selected Social and Organizational Characteristics of the Faculty (N=157*)

Variables	Categories	N	%**
1. Academic Rank	Professor	61	38.9
	Associate Professor	58	36.9
	Assistant Professor	36	22.9
2. Administrative Rank	Top (Deans, Assistant Deans)	16	10.2
	Middle (Division Heads, Chairmen)	19	12.1
	None	122	77.7
3. Tenure	Yes	87	55.4
	No	68	43.3
4. Sex	Female	53	33.8
	Male	104	66.2
5. Age	26-35	28	17.8
	36-50	74	47.2
	51+	55	35.0
6. Level of Students Taught	Undergraduates	2	1.3
	Graduates	74	47.1
	A Mixture	77	49.0
7. Publications in Last 5 Years	None	18	10.0
	1-2	29	25.0
	3-4	38	24.0
	5+	59	40.0
8. Research and Writing Role Preference	1st Choice	40	26.0
	2nd	48	31.0
	3rd	33	21.0
	4th & 5th	35	22.0
9. Teaching Role Preference	1st Choice	101	64.7
	2nd	40	25.6
	3rd	9	5.8
	4th & 5th	6	3.8
10. Advisement Role Preference	1st Choice	11	7.1
	2nd	53	34.0
	3rd	56	35.9
	4th & 5th	36	23.1

* This table includes five subjects dropped from the subsequent analyses because of extensive missing information in their questionnaires.

** Not all variables equal 100% because of missing information.

TABLE 2. Significant Factor Loadings of Eight Adjective Pairs on the Evaluative Dimension of Seven Semantic Differentials. Varimax Rotation (N=152)

Adjective Pair	Innovations						
	EDCO	REOR	UWWC	SITV	UITV	AFAC	COBA
1. Good Bad	.89	.94	.72	.89	.85	.92	.89
2. Progressive Regressive	.87	.91	.84	.88	.75	.86	.86
3. Foolish Wise	.91	.91	-	.93	.87	.89	.76
4. Ineffective Effective	.86	.80	-	.88	.89	.79	-
5. Worthless Valuable	.87	.82	-	.83	.89	.81	.66
6. Important Unimportant	-	-	-	.84	-	-	.64
7. Tense Relaxed	-	-	-	-	-	-	-
8. Positive Negative	.85	.89	-	.80	.78	.84	.84
Percentage of Total Variance	60.58	59.83	39.08	57.37	56.17	58.40	48.09

Note: All Factor Loadings are rounded to the nearest hundreth. No loading of less than .6 on the evaluative dimension or more than .2 on the other factors is reported.

TABLE 3. Correlations of Status and Personality Characteristics of Faculty with Their Receptivity Scores for Seven Organizational Innovations. (N=152)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	$\bar{X}$	SD
1. Academic Rank													1.86	.82
2. Administrative Rank	.20[a]												4.92	1.45
3. Level of Instruction	-.03	-.01											1.44	.51
4. Tenure	.67	.09	.08										2.53	.60
5. Advisement Priority	.00	-.01	.00	.14									3.13	1.31
6. Research Priority	.06	-.10	.03	-.10	-.45								2.49	1.24
7. Teaching Priority	-.04	.02	.04	.08	-.02	-.38							1.50	.85
8. Sex	-.11	-.12	.03	-.05	.07	-.05	-.07						2.83	1.05
9. Number of Publications	-.27	-.04	-.20	-.08	.02	-.27	.10	.08					1.67	.49
10. Basic Affiliation[b]	-.06	-.13	.09	-.12	-.14	.08	-.05	.11	-.04				10.42	3.80
11. General Innovativeness[c]	-.05	-.12	.05	-.08	-.06	.08	.02	.05	-.17	.25			21.78	4.41
12. Openmindedness[d]	-.06	-.15	.08	-.03	-.05	.12	-.04	.04	.06	.33	.53		43.81	8.31
13. EDCO[e]	.06	.06	-.03	-.04	-.05	.09	-.14	-.13	.05	.14	-.07	-.08		
14. REOR	.13	.11	-.05	.06	.18	-.22	.11	.12	.20	-.10	.09	-.02		
15. UWWC	.07	-.01	-.03	.01	-.07	.13	-.01	-.14	-.03	-.07	-.18	-.19		
16. SITV	.04	.10	.18	.06	.02	.11	.04	-.07	.04	-.06	.03	.01		
17. UITV	-.00	.05	-.05	-.02	.03	-.00	-.03	.15	.12	-.05	-.08	.02		
18. AFAC	-.14	.06	-.06	.01	-.08	.10	-.07	-.29	-.01	.12	-.09	-.02		
19. COBA	.13	.26	-.06	-.12	-.10	.17	-.11	-.13	-.15	.08	-.00	.02		

[a]Pearson correlations with an N=152 using a two-tailed test are significant at the following levels: .16 at the .05 level; .21 at the .01 level; .27 at the .001 level.

[b]Basic affiliation was measured by the Dye Local-Cosmopolitan Scale.

[c]General innovativeness was measured by the Trumbo Work-Related Change Scale.

[d]Openmindedness to new ideas was measured by the short form of the Rokeach Dogmatism Scale.

[e]EDCO (education council); REOR (reorganization of the school); UWWC (university without walls college); SITV (supplemented instructional television); UITV (unsupplemented ITV); AFAC (affirmative action); COBA (collective bargaining).

TABLE 3 (Cont'd). Correlations of Status and Personality Characteristics of Faculty with Their Receptivity Scores for Seven Organizational Innovations. (N=152)

Variables	13	14	15	16	17	18	$\bar{X}$	SD
13. EDCO[a]							0.00	1.01
14. REOR	-.04[b]						0.01	0.99
15. UWWC	.19	-.18					0.00	1.01
16. SITV	.15	.17	.01				0.01	1.01
17. UITV	.17	.17	-.09	.24			0.01	1.01
18. AFAC	.37	-.06	.25	.05	.04		-0.00	1.01
19. COBA	.23	-.10	.11	-.03	.04	.03	-0.01	1.01

[a]EDCO (education council); REOR (reorganization of the school); UWWC (university without walls college); SITV (supplemented instructional television); UITV (unsupplemented ITV); AFAC (affirmative action); COBA (collective bargaining).

[b]Pearson correlations with a N=152 using a two-tailed test of significance are significant at the following levels: .16 at the .05 level; .21 at the .01 level; .27 at the .001 level.

TABLE 4. Stepwise Regression Analyses of Receptivity Scores for Seven Organizational Innovations on Various Status and Personality Characteristics. (N=152)

Measures of Status and Personality Characteristics	Innovations[a] AFAC Entry Order[b]	Beta	COBA Entry Order	Beta	EDCO Entry Order	Beta	REOR Entry Order	Beta	SITV Entry Order	Beta	UITV Entry Order	Beta	UWWC Entry Order	Beta
Internal Formal Status														
Academic Rank			(4)	.247*[f]										
Administrative Rank			(1)	.235**			(2)	.294**						
Level of Instruction							(8)	.071	(3)	.113	(3)	.076		
Tenure			(3)	-.310**					(1)	-.188*				
							(7)	-.139						
Internal Informal Status														
Advisement Priority														
Research Priority			(2)	.142										
Teaching Priority	(3)	.093			(4)	-.147	(1)	-.186*	(2)	.166			(2)	.153
Sex	(1)	-.309***	(5)	-.075	(2)	-.162*			(4)	.109				
							(5)	.133			(2)	.116	(3)	-.120
External Status														
Number of Publications in the past 5 years					(5)	.098	(3)	.232**			(1)	.154		
Basic Affiliation Group[c]	(2)	.131			(1)	.204*	(6)	-.113						
Personality														
General Innovativeness[d]														
Openmindedness to Ideas[e]					(3)	-.153	(4)	.171*					(4)	-.100
													(1)	-.151
R	.329		.408		.290		.411		.256		.205		.291	
% of variance explained	11%		17		8%		17%		7%		4%		9%	
F ratio	5.99		5.79		2.67		3.64		2.59		2.17		4.15	
df	3&148		5&145		5&146		8&143		4&147		3&148		3&148	
Level of Significance	.001		.001		.025		.001		.040		.094		.008	

[a] AFAC (affirmative action); COBA (collective bargaining); EDCO (education council); REOR (reorganization of the school); SITV (supplemented instructional television); UITV (unsupplemented ITV); UWWC (university without walls college).

[b] Variables entered by the program on the basis of succeeding highest partial correlations. The program stops "stepping" when less than 1% of explained variance is added by any of the remaining variables.

[c] The Dye scale was used to measure local versus cosmopolitan reference group affiliation.

[d] General innovativeness was measured by the Trumbo Work-related Change Scale

[e] Openmindedness to new ideas was measured by the Rokeach Dogmatism Scale (short form).

[f] The Beta coefficients are starred when the t-tests for the independent variables are found to be significant: *=.05; **=.01; ***=.001.